

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/056,297	01/25/2002	Gerhard Josef Karl Weusthof	TTII 0112 PUS	9772	
7590 06/22/2005			EXAMINER		
Brinks Hofer Gilson & Lione			ALIE, GHASSEM		
P O Box 10395				· · · · · · · · · · · · · · · · · · ·	
Chicago, IL 60610			ART UNIT	PAPER NUMBER	
			3724		
			DATEMAN ED OCIDADOS		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	an No	Applicant(s)	SI		
Office Action Summary  The MAILING DATE of this communication ap		Application					
		10/056,29		WEUSTHOF ET AL	<u>-</u> .		
		Examiner		Art Unit			
		Ghassem		3724	drose		
Period fo		anon appears on the	e cover sheet wh	i the correspondence add	n e33		
THE - Exter after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FO MAILING DATE OF THIS COMMUNIC nsions of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this commun period for reply specified above is less than thirty (30) or period for reply is specified above, the maximum stature to reply within the set or extended period for reply with the set or extended peri	ATION. 37 CFR 1.136(a). In no evinication. days, a reply within the statutory period will apply and will, by statute, cause the app	ent, however, may a reputer may a reputer minimum of thirty ill expire SIX (6) MONT lication to become ABA	oly be timely filed (30) days will be considered timely. HS from the mailing date of this con NDONED (35 U.S.C. § 133).			
Status							
1)⊠	Responsive to communication(s) filed	on <u>27 May 2005</u> .					
2a) 🗌	nis action is <b>FINAL</b> . 2b) This action is non-final.						
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims			•			
5)□ 6)⊠ 7)□	Claim(s) 1-18 is/are pending in the ap 4a) Of the above claim(s) 4,5,14-16 ar Claim(s) is/are allowed.  Claim(s) 1-3, 6-13, and 17 is/are reject Claim(s) is/are objected to.  Claim(s) are subject to restricting	nd 18 is/are withdra		ration.			
Applicat	ion Papers						
10)⊠	The specification is objected to by the The drawing(s) filed on <u>25 January 20</u> Applicant may not request that any object Replacement drawing sheet(s) including the oath or declaration is objected to	<u>02</u> is/are: a)⊠ acc ion to the drawing(s) b he correction is requir	pe held in abeyand red if the drawing(s	e. See 37 CFR 1.85(a). s) is objected to. See 37 CF	R 1.121(d).		
Priority (	under 35 U.S.C. § 119						
a)	Acknowledgment is made of a claim for All b) Some * c) None of:  1. Certified copies of the priority d  2. Certified copies of the priority d  3. Copies of the certified copies of application from the Internation  See the attached detailed Office action	ocuments have bee locuments have bee f the priority document al Bureau (PCT Rul	en received. en received in Ap ents have been i le 17.2(a)).	oplication No received in this National s	Stage		
2) Notice 3) Infor	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PT mation Disclosure Statement(s) (PTO-1449 or Per No(s)/Mail Date		Paper No(s)	ummary (PTO-413) /Mail Date formal Patent Application (PTO 	)-152)		

Application/Control Number: 10/056,297

Art Unit: 3724

## Claim Rejections - 35 USC § 103

Page 2

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 2, 6, 8, 13, and 17 rejected under 35 U.S.C. 103(a) as being unpatentable over Caluori et al. (6,035,757), hereinafter Caluori, in view of Osenbruggen (WO 99/02310) and Takano (6,153,957). Regarding claim 1, Caluori teaches a laser arbor for a saw 13 having a spinal that 42 that rotates a saw blade 30 relative to a non-rotating portion of the saw 13. Caluori also teaches that the arbor includes a housing 12, a laser light 32 disposed at least in part within the housing 12. Caluori also teaches that housing 12 is secured to the spindle 42 on the laser arbor. Caluori also teaches a circuit 17, 18 electrically connected to the laser for providing power to the laser. Caluori also teaches that the circuit provides power from a voltage source 16. See Figs. 1-3 and col. 2, lines 49-67 and col. 3, lines 1-37 in Caluori. Caluori does not teach that the voltage source includes a portion secured to the non-rotation portion of the saw, wherein electrical current to power the laser light is generated on the spindle. Osenbruggen teaches a cutting tool 200, 1100 which has an emitting light 204, 906 to illuminate the surface of the workpiece to be cut. Osenbruggen also teaches that the voltage source for the lamps can be supplied from an inductor assembly connected to the power tool or the saw. See page 13, lines 11-24 in Osebbruggen. As is well known in the art inductors work by a stator that is connected to the non-rotating part of a electric device and a rotor which is connected to a shaft of the electric device such as taught

by Takano. Takano teaches an electric generator that has a rotor 14 which is connected to a shaft 27 and a stator 13 which is connected to the non-rotating part 12 of the generator. See Figs 1-7 and col. 3, lines 18-56 in Takano. Takano's generator can be used to provide power for the emitting light of a cutting assembly as suggested by Osenbruggen. Therefore, It would have been obvious to a person of ordinary skill in the art to provide Caluori's saw assembly with the arbor type generator such as taught by Takano in order to provide power to the emitting laser light of the arbor by using the rotary power of the shaft of the saw instead of a battery as suggested by Osenbruggen. Takano's generator has to can be connected to or combined with the Caluori's arbor in order to provide power to the emitting laser. In addition, Official notice is taken that connection of non-rotating part of the generator to the non-rotating part of a device is well known in the art. For example, Chen (6,093,985) teaches that the non-rotary part of the generator is connected to the non-rotating part of a bicycle. The non-rotating part of the generator has to be connected to the nonrotating part of the saw in order to keep the non-rotating part still relative to the rotating part of the generator. Therefore, the non-rotating part of the saw can be connected to the housing of the saw or other non-rotating parts of the saw.

Regarding claim 2, Caluori, as modified above, teaches everything noted above including the circuit includes a generator, as taught by Takano, and the generator has a rotor 14 and a stator 13 associated with the non-rotating portion of the saw, whereby electrical energy is generated as the spinal rotates the rotor 14 relative to the stator 13. Takano's generator is part of the circuit that provides power to the laser light. See Fig. 1 in Takano.

Regarding claim 6, Caluori, as modified above, teaches everything noted above including that the circuit includes a power conditioning circuit that provide power within a predetermined voltage range to the laser. The generator provides the predetermined voltage to the laser.

Regarding claims 8 and 17, Caluori, as modified above, teaches everything noted above including that the rotor 14 being rotated by the motor relative to the stator 13 for generating power in the rotor for the light source 32 in Caluori. See Fig. 1 in Takano and Fig. 2A in Caluori. Caluori, as modified above, also teaches that the generator is electrically connected to the light source 32 in Caluori for providing power produced in the spindle. See Fig. 1 in Takano and Fig. 2A in Caluori. Caluori as modified by Takano teaches that the spindle produces power.

Regarding claim 13, Caluori teaches that the light 32 is LED. See col. 3, lines 10-20 in Caluori.

Claims 3, 7, and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caluori in view of Osenbruggen and Takano, as applied to claim 1, and in further view of Inariba (3,555,325). Regarding claim 3, Caluori, as modified above, teaches everything noted above including a magnet 33 connected to the rotor 14 and an arcuate coil 18 connected to the stator 13. See Fig. 1-3 in Takano. Caluori, as modified above, does not teach a permanent magnet secured to a fixed guard and the arcuate coil section connected to the spindle. However, the use of permanent magnet secured to the fixed guard and an arcuate coil connected to the section rotated by the spindle or rotor of a generator is well known in the art such as taught by Inariba. Inaribia teaches a generator having a permanent magnet 2

connected to the fixed guard 1, which also is a stator, and an arcuate coil 4 connected to the rotor or spindle 5. See Figs. 1-3 in Inariba. It would have been obvious to a person of ordinary skill in the art to provide Caluori's generator, as modified by above, with the permanent magnet and stator and rotor arrangement as taught by Inariba as an alternative arrangement of the stator and rotor of the generator which does not change the function of the generator.

Regarding claim 7, Caluori, as modified above, teaches that the fixed guard 1 is part of the non-rotating portion of the saw. See Fig. 1 in Inariba. The fixed guard or the housing 1 is part of the stator which is connected to the non-rotating port of Caluori's saw.

Regarding claim 9, Caluori, as modified above, teaches everything noted above including that rotor 5 is an electrical coil 4. See Fig. 1 in Inariba.

Regarding claim 10-12, Caluori, as modified above, teaches everything noted above including that stator is an electrical magnet 2. See Fig. 1 in Inariba.

## Response to Amendment

4. Applicant's arguments filed on 05/27/05 have been fully considered but they are not persuasive.

Applicant's argument that Takano and Osenbruggen do not teach any structure for generating power for the use with components that are located on the rotor of the generator; therefore they can not be combined with a reference that teaches the use of laser light on the rotor of a tool is not persuasive. In this case, Caluori teaches a laser arbor for a saw having a spinal that rotates a saw blade relative to a non-rotating portion of the saw and the arbor includes a housing, a laser light disposed at least in part within the housing. Caluori

also teaches a circuit electrically connected to the laser for providing power to the laser and ' the circuit provides power from a voltage source to the laser lights. Caluori does not teach that the voltage source has a portion secured to the non-rotating portion of the saw. However, a generator, an inductor, or the like has a non-rotating portion that is secured to a frame, a device, or a tool. The use of a generator or the like as a voltage source for providing power to emitting lights or the like is well known in the art such as taught in Takano. Osenbruggen teaches that the power source for the lights of an alignment system for a tool could be "the tool itself". Therefore, the tool itself may supply power to the lamps, not a battery pack or batteries. Osenbruggen also teaches that the power can be supplied to the lamps by an inductor assembly which eliminates the use of batteries as a power source for the lamps. As it is well known the inductor assembly also has a non-rotating portion. In addition, the use of power sources similar to an inductor assembly, such as a generator or the like, for supplying power to lamps or the like is well known in the art. Furthermore, it is well known to replace barriers or a battery pack as a power source with a generator or the like to eliminates the use of batteries. For example, Seki et al. (5,128,480) teaches a system that uses the rotational movement of a tool 10 for generating power for a lamp 23. See Figs. 1-7 and col. 3 lines 26-52 and col. 4, lines 1-52 in Seki. Schwaller (5,857,762) also teaches a generator 1 that uses rotational movement of a device to generate power for lamps 2, 3 and a rechargeable battery. See Figs. 1-8B and col. 6, lines 19-67 in Schwaller. Therefore, as stated above, Takano's generator can be used to provide power for the emitting light of Caluori's cutting assembly, as an alternative way to generate power for the emitting

light in Caluori. It should be noted that Caluori does teach that the laser light is located on the rotor of the tool. Osenbruggen and Takano teach that the power for a laser light can be generated from a generator. Therefore, the power for the laser light in Caluori's saw can be supplied by the generator that use the rotor or spindle of the tool as taught by Osenbruggen and Takano. Whether or not Osenbruggen and Takano teach that a laser light located on the rotor of the power generator is not relevant, since Caluori teaches that limitation.

Osenbruggen and Takano only provide an alternative power source for generating power for the laser light in Caluori.

Applicant's argument that Osenbruggen and Takano do not teach a voltage source that includes a portion secured to the non-rotating portion of the saw to provide power to the laser with the electric current to power laser being generated on the spindle is not persuasive. As stated above, Osenbruggen teaches that the power can be supplied to the lamps by an inductor assembly which eliminates the use of batteries as a power source for the lamps. As it is well known the inductor assembly also has a non-rotating portion. Therefore, Osenbruggen teaches that the power for laser light can be generated by a mechanism that has a rotor and stator. Furthermore, it is well known to replace barriers or a battery pack as a power source with a generator or the like to eliminates the use of batteries. For example, Seki et al. (5,128,480) teaches a system that uses the rotational movement of a tool 10 for generating power for a lamp 23. See Figs. 1-7 and col. 3 lines 26-52 and col. 4, lines 1-52 in Seki. Schwaller (5,857,762) also teaches a generator 1 that uses rotational movement of a device to generate power for lamps 2, 3 and a rechargeable battery. See Figs. 1-8B and col. 6, lines 19-67 in Schwaller.

Application/Control Number: 10/056,297 Page 8

Art Unit: 3724

## Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Schwaller (5,857,762), Seki et al. (5,128,480), Liaw et al. (2002/0149945), Chiu (2003/0071464), Hegyi (4,648,610), Hicks (6,104,096), Clark (4,924,125), Wu et al. (2004/0194600) teach a generator for supplying power to a emitting light.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ghassem Alie whose telephone number is (571) 272-4501. The examiner can normally be reached on Mon-Fri 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan Shoap can be reached on (571) 272-4514. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, SEE <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (too-free).

GA/ga

June 17, 2005

Allan N. Shoap Supervisory Patent Examiner Group 3700